

AMENDMENT TO THE SPECIFICATION

Replace the paragraph beginning on page 4, lines 5-23, with the following amended paragraph:

Fig. 2 depicts a cutting tool for machining valve seats of cylinder heads of internal combustion engines. Cutting tool 10 has a tool body 12 comprising a shank portion 20 (shown only partially) and a cutting portion 22. Typical of such tools, cutting portion 22 is fitted with three blades such as blades 14 and 16 having cutting edges 30 and 32 for machining, at least, portions of valve seat surfaces. In addition, a reamer 24 (shown only partially in Fig. 2) is supported by nose portion 18 along an axis of rotation of the tool body 12 to provide cutting edges for machining a valve stem guide bore. Shank portion 20 includes elements for mounting tool body 12 to a tool driving device such as a machine spindle, or for mounting tool body 12 to a tool coupling device for mounting to a tool driving device, as is well known. Cutting portion 22 comprises recesses (recess 44 in Figs. 3a, 3b) in which are received replaceable inserts or blades such as blades 14 and 16. Blades 14 and 16 abut depth adjusting stops 50 and 52, each stop being adjustable to set the stand-off distance of an abutting surface of a blade from a reference plane (not shown) on tool body 12. The abutting surface of a blade may be flat and be formed in a portion of the end of, or a shoulder on, the blade. Suitable stops, such as stops 50 and 52, are well known, such as, for example, flat headed screw engaging threaded holes in tool body 12, and studs mounted to tool body 12 with head members, wherein the stud and/or the head member are adjustable to position the blade abutting surface relative to tool body 12.

Page 5, after line 15, insert the following new paragraph:

As can be seen in Fig. 2, the insert 14 is of shorter axial length than the leaf 40, wherein an axial front end portion of the insert, which carries the cutting edge 30, projects axially forwardly past the leaf. Also, an axially rear end portion of the insert projects axially rearwardly past the leaf so as to be engageable with the stop 52.

Replace the paragraph bridging pages 5 and 6 with the following amended paragraph:

Referring to Figs. 5a and 5b, each leaf, as illustrated by leaf 74, is defined by a slot, or isolating channel, through retention disk 62, such as slot 86, and an insert receiving recess, such as recess 66. Slot 84 and recess 64 define leaf 72; and, slot 88 and recess 68 define leaf 76. At least one threaded hole is formed in retention disk 62 to straddle each slot, the upper portion of each hole receiving the head end of a clamping screw threadably engaged in the hole. As shown in Fig. 4, two screws are associated with each slot, such as screws 90 in slot 86. Threaded hole 78 (Fig. 5b) receives a clamping screw, or leaf-bending element, such as clamping screw 90 (Fig. 4), which has a tapered head (shown dashed in Fig. 5b). Chamfers 92 and 94 at the entry of hole 78 are formed in leaf 74 and retention disk 62 respectively. To provide a "self-locking" capability, the angle of chamfers 92 and 94 are made slightly steeper than the taper of the head of screw 90. The diameter in the chamfered portion of hole 78 below the entry is less than the diameter of the head screw 90. As the head of screw 90 is advanced down chamfers 92 and 94, leaf 74 is elastically deformed, that is, bent toward an opposing wall 75a of the recess 66. To ~~insure~~ ensure bending is allowed near the top of leaf 74, wall 75 is inclined at a shallow clearance angle 110 relative to the wall 75a. Thus, the wall 75 diverges from the wall 75a in a direction away from an open end of the recess 66, when the leaf 74 is in a relaxed state, as shown in Fig. 5a, ensuring that the gap between leaf 74 and a blade or insert is wider at the base of leaf 74 than near its top. With blade 102 (shown dashed in Figs. 5a and 5b) in place in recess 66, advance of screws 90 into

retention disk 62 bends leaf 74 against blade 102, narrowing the width of recess 66 and eliminating the gap between leaf 74 and the blade at least at the top 74a of leaf 74. Once contact is made between leaf 74 and the blade is seated against the sidewall of recess 66, further advance of screws 90 builds compressive force through leaf 74 against blade 102.